

from consideration, have been canceled, without prejudice, to Applicants filing a divisional application.

Claim 1 has been amended to more particularly highlight the nature of the present invention. Support for the amendments is set forth in the specification at, for example, page 3, lines 1-18. It is respectfully submitted that the present claims are clearly patentably distinguishable from the cited prior art, and reconsideration is earnestly requested.

Turning first to the rejection of claims 1-3, 5 and 10, these claims stand rejected under 35 U.S.C. 102(e) as being anticipated by U.S. 5,817,424 to Ohmi. The Examiner states that the '424 patent discloses a method of forming a passive oxide film on the surface of a steel or iron pipe. Noting the recitation in the preamble of "a method of producing a hydrocyanic acid synthesis catalyst" in the present claims, the Examiner considers that the passive oxide film formed on the steel pipe surface as disclosed by the reference is the catalyst that Applicants are claiming because both Applicants and the reference conduct the process in the same manner. This rejection is respectfully traversed.

In the first place, it is submitted that the process taught by the Ohmi patent is not the same method as is set forth in the present claims. More particularly, the Ohmi process does not appear to involve sequentially exposing any iron surface to oxidative and reductive atmospheres. Rather, the Ohmi process involves subjecting stainless steel to a heat treatment with a gas containing hydrogen and oxygen together at selected concentrations so as to form a passive oxide film based on chromium oxide. Indeed, Ohmi would appear to teach away from carrying out the formation of such a chromium

oxide layer by sequential oxidation and reduction reactions. Thus, in the Background section, Ohmi discusses a prior art process (Col. 1, ll. 26-40) in which a dry method is used, conducted by means of independent oxidation and reduction reactions. Ohmi states that the "period required for the processes is long." (Col. 1, ll. 39-40).

Further, and importantly, both the prior art process referenced and Ohmi are concerned with a specific application, i.e., providing stainless steel with a passive oxide film having chromium oxide as a chief component, apparently for some semi-conductor applications. On the other hand, the present claims require the step of selecting an iron source and form for the hydrocyanic acid synthesis catalyst. That selection step is not set forth in Ohmi. In summary, the claim preamble identifying the claimed method as one for producing a hydrocyanic acid synthesis catalyst must be considered for patentability purposes in view of the selection step set forth in the body of the claim.

Turning to the other rejection, claims 4 and 6-9 stand rejected under 35 U.S.C. 103(a) as being unpatentable over the '424 patent, as applied to claims 1-3, 5 and 10 in the other rejection, and, in further view of U.S. 5,840,368 to Ohmi. This rejection is also traversed. Noting that the '424 Ohmi patent does not specifically disclose the claimed oxygen concentration, the Examiner states that it would have been *prima facie* obvious to one of ordinary skill in the art to have determined the optimum amount of oxygen for such process in order to obtain the desired oxide film thickness. As to the pressure limitation, the Examiner notes that the '424 Ohmi patent does not specifically disclose the pressure set forth in the claims, but that the '368 Ohmi patent fairly suggests conducting a thermal oxidation process at a pressure which would fall within the claimed pressure range. Further, the Examiner concludes that it would have been *prima facie* obvious to

one of ordinary skill in the art at the time the invention was made to conduct the Ohmi '424 process at the temperature taught by the Ohmi '368 patent since both teach the same thermal oxidation process. Lastly, as to the claimed space velocity, after noting that the '424 Ohmi patent is silent as to this parameter, the Examiner states that it would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to have predetermined the space velocity of the oxidative and reductive gas for such process, since that would involve only routine experimentation. This rejection is traversed.

In view of the deficiencies of the '424 Ohmi patent noted in connection with the prior rejection, which statements are herein incorporated, this rejection should fall as well. Specifically, the present invention concerns a method for forming a hydrocyanic acid synthesis catalyst which involves selecting an iron source and form for the catalyst and then sequentially exposing the surface of the iron source to oxidative and reductive atmospheres. The Ohmi '424 patent neither anticipates nor makes obvious such a method. Rather, the Ohmi '424 patent, as previously discussed, concerns a specific method for forming on stainless steel a passive oxide layer having chromium oxide as a chief component.

Even further, the Ohmi '368 patent concerns an apparatus and a method for forming silicon oxide films involving a thermal oxidation process using a mixed gas of water vapor and oxygen supplied to an oxidation further at low temperatures of 600° C. or less, forming a highly pure oxide film. (See Col. 2, ll. 34-44). Thus, Applicants question whether the two Ohmi patents can be considered to be concerned with analogous art so that there would be any impetus for one of ordinary skill in the art to even attempt to

combine these two processes, particularly where the nature of the oxide film seems to be quite different, as are the parameters used.

Regardless, and in any event, even if one of ordinary skill in the art would utilize the teachings of these two patents together, the presently claimed invention would not result. Neither Ohmi patent concerns a method for producing a hydrocyanic acid synthesis catalyst, nor is there any teaching of a method involving selecting an iron source for the catalyst. Still further, it is not seen how one of ordinary skill in the art would even turn to these Ohmi patents when concerned with producing such an acid synthesis catalyst, much less that it would be routine experimentation to determine the desired parameters set forth in the subject claims based upon the teaching of patents concerned with forming either silicon oxide or chromium oxide surfaces.

In summary, it is respectfully requested that the Examiner, upon reconsideration, remove the rejections, allow the application, and pass this to issue. In the event that the Examiner considers that any issues remain, the Examiner is invited to telephone the undersigned attorney.

Respectfully submitted,



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Date: August 13, 2002

In re Appln. of Igarashi et al.
Application No. 09/669,426

CERTIFICATE OF MAILING

I hereby certify that this RESPONSE TO OFFICE ACTION (along with any documents referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231.

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Stephen R. Goss

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